



Fact Sheet

California Environmental Protection Agency

 **Air Resources Board**

Composite Wood Products

Why is the ARB focusing on composite wood products?

An estimated 2.5 billion square feet of composite wood products (such as particleboard, medium density fiberboard, hardwood plywood, and composite veneer) are sold in California annually. Because adhesive binding systems used to manufacture these composite products contain urea-formaldehyde resins, the public is being exposed to formaldehyde emissions, which are known to have cancer effects and to exacerbate asthma. Formaldehyde emissions from composite building materials could exceed 400 tons per year in California. Formaldehyde is also released into the air by combustion of fuels from automobiles and industrial sources, cigarettes, and is formed in the atmosphere from reactions of other air pollutants.

Why is the ARB concerned about formaldehyde?

Formaldehyde is an important industrial chemical used to make other chemicals, building products, and consumer products. It is a volatile organic compound, that is, becomes a gas at normal room temperatures. Formaldehyde is used as part of the glue or adhesive in composite wood products (particleboard, hardwood plywood, and medium density fiberboard); preservatives in some paints, coatings, and cosmetics; the coating on permanent press fabrics and draperies; and certain insulation materials. The Air Resources Board has identified formaldehyde as a toxic air contaminant in California. The Office of Environmental Health Hazard Assessment has concluded that exposures to formaldehyde can cause cancer in humans. Exposure to airborne formaldehyde may also cause non-cancer symptoms, such as irritation of the eyes, skin and respiratory tract, coughing, sore or burning throat, nausea and headaches.

What is the ARB doing to reduce public exposure to formaldehyde from composite products?

The ARB is currently developing a control measure to reduce formaldehyde emissions from composite products. Over the next year, the ARB will conduct an air monitoring effort and a product survey to develop a better estimate of emissions and to evaluate the public's health risk. The ARB will also evaluate alternatives to urea-formaldehyde resins in composite products. There are companies that currently produce formaldehyde-free or nearly formaldehyde-free building products that meet general construction standards. Using formaldehyde-free or nearly formaldehyde-free emitting products in homes and construction is a pollution prevention measure that can reduce formaldehyde exposure by controlling the source.

For more information

Visit our web site at <http://www.arb.ca.gov/toxics/toxics.htm> for more information on formaldehyde or call the ARB's Public Information Office at (916) 322-2990. You may also obtain this document in an alternative format by contacting ARB's ADA Coordinator at (916) 322-4505 (voice); (916) 324-9531 (TDD, Sacramento area only); or (800) 700-8326 (TDD, outside Sacramento).

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our web site: www.arb.ca.gov.